

Claims:

1. A lock adapted to be received in a wear member for holding a wear member to a structure of an excavator subjected to wear, the lock comprising:

a body adapted to be received in an opening of the wear member, the body including a front wall for opposing a bearing wall of the structure, a rear wall for opposing a bearing wall of the wear member, and a hole extending through the body and opening in the front and rear walls, the hole having threads;

a threaded member for expanding the lock to tighten the mounting of the wear member on the structure, the threaded member being received in the hole;

a resilient member impeding loosening of the threaded member; and

a retainer releasably holding the body in the opening of the wear member.

2. A lock in accordance with claim 1 in which the resilient member is received in the hole and advanced forward into contact with the structure by the threaded member and compressed between the threaded member and the structure so that the lock applies a continuous biasing force to the wear member.

3. A lock in accordance with claim 2 in which the resilient member further includes an elastomeric body and a hard shell fixed to the elastomeric body to contact the structure and protect the elastomeric body.

4. A lock in accordance with claim 1 in which the resilient member is substantially wider than the threaded member.

5. A lock in accordance with claim 1 wherein the body includes an opening with threads, and wherein the retainer includes a threaded shank received in the opening and adjustable to project from one surface of the body to hold the lock in the wear member and to retract within the one surface of the body to permit removal of the lock.

6. A lock in accordance with claim 5 wherein the hole and the opening are substantially parallel.

7. A lock in accordance with claim 1 wherein the body includes an arcuate passage and the retainer includes a latch that moves in the arcuate passage.

8. A lock in accordance with claim 7 in which the latch includes an elastomeric member and a hard plug fixed to the elastomeric member, wherein the plug is movable to project beyond one surface of the body and to retract within the one surface of the body.

9. A lock in accordance with claim 7, in which the passage includes a shoulder and the latch has a ledge that engages the shoulder to releasably prevent retraction of the latch.

10. A lock adapted to be received in a wear member for holding the wear member to a structure of an excavator subjected to wear, the lock comprising (i) a body having an elongate, arcuate configuration, (ii) a movable take-up element projecting from the body for tightening the connection of the

wear member on the structure, and (iii) a latch projecting from the body for retaining the lock in the wear member.

11. A lock in accordance with claim 10 in which the body includes a first end and a second end, wherein the body is wider at the second end than at the first end.

12. A lock in accordance with claim 11 in which the body gradually tapers from the second end to the first end.

13. A lock in accordance with claim 10 wherein the take-up element and the latch are each a resilient member.

14. A lock adapted to be received in a wear member for holding the wear member to a structure of an excavator subjected to wear, the lock comprising:

a body including a front wall for opposing a bearing wall of the structure, a rear wall for opposing a bearing wall of the wear member, and a threaded hole extending through the body and opening in the front and rear walls; and

a threaded member received in the hole and selectively projecting beyond the front wall of the body to expand the lock and thereby tighten the mounting of the wear member on the structure, the threaded member having a thread deformation forward of the front wall to prevent loosening of the threaded member.

15. A wear assembly for protecting a surface of a structure subjected to wear comprising:

a boss fixed to the structure;

a wear member fit with the boss to protect the structure from wear; and

a lock for holding a wear member to a structure subjected to wear, the lock comprising a body adapted to be received in an opening of the wear member, the body including a front wall for opposing a bearing wall of the structure, a rear wall for opposing a bearing wall of the wear member, and a hole extending through the body and opening in the front and rear walls, the hole having threads, a take-up element including a threaded member for expanding the lock to tighten the mounting of the wear member on the structure, the threaded member being received in the hole, means for impeding loosening of the threaded member, and means for retaining the body in the opening of the wear member, which is independent of the impeding means.

16. A wear assembly in accordance with claim 15 in which the threaded member is selectively adjustable to project at varying distances from the front wall of the body to engage the bearing wall of the structure, and to be retracted within the front wall.

17. A wear assembly in accordance with claim 15 in which the take-up element further includes a resilient member that is received in the hole and advanced forward into contact with the structure by the threaded member and compressed between the threaded member and the structure so that the lock applies a continuous biasing force to the wear member.

18. A wear assembly in accordance with claim 15 in which the body includes an arcuate passage and the means for retaining includes a latch that moves in the arcuate passage.

19. A wear assembly in accordance with claim 18 in which the latch includes an elastomeric body and a hard plug fixed to the elastomeric body, wherein the plug is movable to project beyond one surface of the body and be retracted within the one surface.

20. A wear assembly in accordance with claim 19 in which the passage includes a shoulder and the retainer has a ledge portion that engages a shoulder to selectively prevent retraction of the latch.

21. A wear assembly in accordance with claim 16 in which the wear member is a shroud that protects a digging edge of an excavating bucket.

22. A wear member for protecting a surface of an excavator subjected to an abrasive environment, the surface including a boss, the wear member comprising an interior side facing the surface and including a slot to receive the boss, an exterior wear surface, and a lock-receiving passage, the passage having a curved shape with two opposite ends, each end opening in the exterior wear surface.

23. A wear member in accordance with claim 22 in which the passage communicates with a cavity defined along the interior side so that the lock can oppose a bearing face of the boss.

24. A wear member in accordance with claim 23 in which the passage includes a first segment to one side of the cavity and a second segment to the

other side of the cavity, wherein the first segment has a larger cross-section than the second segment.

25. A wear member in accordance with claim 22 wherein the passage includes a stop to locate the lock in a set position.

26. A wear member in accordance with claim 22 wherein a first segment of the passage adjacent one end has a larger cross-section than a second segment of the passage adjacent the other end.

27. A wear member in accordance with claim 22 further including a pair of legs to straddle an edge of a structure having the surface.

28. A wear member in accordance with claim 27 wherein the passage is defined in one of the legs.

29. A wear member in accordance with claim 22 wherein the ends of the passage each opens in the same general direction and in the same wall surface.

30. A wear member in accordance with claim 22 wherein the slot includes grooves for receiving rails on the boss.

31. A wear member in accordance with claim 22 wherein the passage is elongate and narrow.